

SURFACE TRANSPORTATION BOARD Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

May 31, 2006

Kathryn Kusske Floyd, Esq. Mayer, Brown, Rowe & Maw LLP 1909 K Street, NW Washington, D.C. 20006

RE: STB Finance Docket No. 34658, Alaska Railroad Northern Rail Extension Project

Dear Ms. Floyd:

You may recall that the Board's Section of Environmental Analysis (SEA) and you, on behalf of your client, Alaska Railroad (Applicant), discussed facilitating the collection of baseline date information related to fisheries habitat and hydrologic properties at potential stream crossings in the field that could be used both for preparation of the Environmental Impact Statement (EIS) by SEA and the Applicant's permitting and design activities. To that end, SEA's third-party contractor team, led by ICF Consulting, coordinated with the Applicant's contractor, HDR, Inc. (HDR), to develop a common protocol for collecting field information by the proposed project. I am now writing to transmit to you base-line information related to fisheries habitat and hydrologic properties collected by the ICF Consulting team during field investigation conducted from September 18, 2005 through September 30, 2005, for a selection of potential stream crossings for route alignments identified in: Preliminary Alignments Map Set, Alaska Railroad Northern Rail Extension Project, Document 01-0800-001 Rev. 1, July 2005.

During pre-field planning, the ICF Consulting team selected 80 sites for investigation. The selected sites did not include any potential stream crossing locations on private lands or military lands indicated as being non-accessible based on land-status mapping made available to ICF Consulting by HDR. Field data collection was conducted by 2- and 3-person crews. Each crew included one or two fisheries biologists and one hydrologist. The field crews accessed selected sites by helicopter, located each crossing site using GPS coordinates, made field observations and measurements, took photographs, and completed data forms. At some of the sites selected during pre-field planning, safe helicopter landing sites were not available or no water or fish habitat was apparent at the crossing, and an assessment of the crossing site was completed from the helicopter. Examination of sites from the air required less time than the more complete observations conducted on the ground and provided the field teams with time to select some additional sites for examination while the field work was in progress. A total of 116 sites (54% clear water, 12% glacial water, 5% mixed water, 8% humic stained, and 21% dry) were evaluated, including 57 ground surveys and 59 aerial surveys. Table 1 provides a summary

of the sites examined by water type, Table 2 provides a listing of the sites, and Figures 1 and 2 show the site locations. Photographs that illustrate the variety of crossings evaluated are provided in Figure 3. The locations of the sites shown in the photographs are shown on Figures 1 and 2.

I am providing the detailed information collected for each of the sites in three electronic formats. Data obtained from the field observations is summarized in two Excel spreadsheets; a third spreadsheet provides definitions of the terms used and associated metadata. Field observation data are provided as ArcView shapefiles. The data collection forms, site photographs and maps are compiled for each site in an Adobe[®] format file. The latitude/longitude coordinates included in these files reflect the actual locations of the field measurements, which for some sites differ from the planned locations. Site locations are "named" based on the alignment (N1, N2, N3, N4, N5, S1, S2, and BLS) and the approximate route mileage (e.g. N3-5.1).

If you have any questions concerning the information provided, please feel free to contact Dave Navecky of my staff at 202-565-1593 or Alan Summerville of ICF Consulting, our independent third-party contractor, at 9300 Lee Highway, Fairfax, Virginia, 22031.

Sincerely.

Victoria Rutson

Chief, Section of Environmental Analysis

Table 1. Summary of stream crossing sites by water type classification

Water Type	Aerial Survey	Ground Survey	
Clear	37	26	
Glacial	1	13	
Clear/Glacial	0	4	
Clear/Humic	0	2	
Humic	0	9	
Dry/Wetland	21	3	
Total Sites	59	57	

Table 2. Stream crossing sites examined during 18 to 30 September 2005 (highlighted sites are shown in Figure 3)

Record Number	Crossing Identifier	Stream Name or Connection	Initial Classification	Survey Method
1	N1-0.8	Piledriver Slough	Stream	Ground
2	N1-1.2	trib to Piledriver Slough	Stream	Ground
3	N1-1.6	trib to Piledriver Slough	Stream	Ground
4	N1-4.0	R edge bc of Tanana R.	floodplain slough	Ground
5	N1-4.8	R edge, trib to Tanana R in fp.	floodplain slough	Ground
3	N1-7.3	L edge, trib in TR fp	Overflow	Aerial
7	N1-13.4	trib braidchnl to Tanana R. L edge	Overflow	Aerial
3	N1-22.3	L edge of TR inside fp	Stream	Ground
•	N1-22.8	trib braidchni to Tanana R. L edge	Stream	Ground
10	N1-26.5	trib outside of fp L edge of TR	Stream	Aerial
11	N2-1.3	trib to Piledriver Slough	Stream	Ground
12	N2-1.7	trib to Piledriver Slough	Overflow	Aerial
13	N2-1.8	trib to Piledriver Slough	Stream	Aerial
14	N2-3.6	trib to Piledriver Slough	Stream	Ground
15	N2-3.9	trib to Piledriver Slough	Overflow	Ground
16	N2-4.6	Twenty Mile Creek/bc to TR	Stream	Aerial
17	N2-7.1	trib to 20 Mile Creek	Overflow	Aerial
18	N2-7.2	trib to 20 Mile Creek	Stream	Aerial
19	N2-8.1	large trib to Pliedriver Slough	Stream	Ground
20	N2-8.5	sm trib from TR flowing to Twenty Mile Slough	Stream	Aerial
21	N2-10.2	Side channel of TR connects ds to PR slough	floodplain slough	Aerial
22	N2-10.9	Side channel of TR connects ds to PR slough	floodplain slough	Ground
23	N2-11.7	Side channel of TR connects ds to PR slough	Overflow	Aerial
24	N2-11.9	Side channel of TR connects ds to PR slough	Stream	Aerial
25	N2-12.8	trib leading into side channel above	Overflow	Aerial
26	N2-13.1	Piledriver Slough	Stream	Ground
27	N2-13.5	Piledriver Slough	floodplain slough/overflow	Ground
28	N2-14.0	fork/trib to PR slough	Stream	Aerial
29	N2-14.6	fork/trib to PR slough	Stream	Aerial
30	N2-14.8	R edge braid channel of TR	Stream	Ground
31	N2-15.5	channel from main TR to side channel of N2-14.8	Overflow	Ground

Record Number	Crossing Identifier	Stream Name or Connection	Initial Classification	Survey Method
32	N2-15.9	R edge braid channel of TR	Stream	Ground
33	N2-16.0	trib from N2-15.9	Overflow	Ground
34	N2-16.1	trib from N2-15.9	Overflow	Aerial
35	N2-16.7	Side braid channel of TR	Stream	Ground
6	N2-18.2	R edge braid channel of TR	floodplain slough	Ground
7	N2-20.9	TR and/or R edge of Salcha Creek	floodplain slough	Ground
8	N2-21.2	TR and/or R edge of Salcha Creek	floodplain slough	Ground
9	N2-26.1	L edge TR	floodplain slough	Ground
ю	N3-5.1	junction of Piledriver Slough and Twentythree Mile Slough	Stream	Ground
.1	N3-6.3	trib to Piledriver Slough	Overflow	Ground
2	N3-9.8	Piledriver Slough	Overflow	Ground
3	N3-10.4	trib to Piledriver Slough	Stream	Ground
4	N3-11.9	trib to French Creek	Stream	Ground
5	N3-12.6	trib to French Creek	Stream	Ground
6	N3-19.6	Little Salcha River	Stream	Ground
7	N3-24.1	Salcha River	Stream	Ground
8	N4-1.8	L edge of TR	Overflow	Ground
9	N4-2.4	smaller braid channel TR	Overflow	Aerial
0	N4-2.6	smaller braid channel TR	Overflow	Aerial
1	N5-0.5	trib to TR connected up/down stream	Overflow	Aerial
2	N5-2.1	trib to TR	Overflow	Aerial
3	N5-3.8	above	Overflow	Aerial
4	N5-4.9	above	Overflow	Aerial
5	N5-7.1	FS L edge braid channel of TR	floodplain slough	Ground
6	S1-2.4	flows to floodplain slough on Tanana River	Stream	Ground
7	S1-2.5	flows to floodplain slough on Tanana River	Stream	Ground
8	S1-3.4	flows to floodplain slough on Tanana River	Stream	Ground
9	S1-10.1	flows to floodplain slough on Tanana River	Stream	Aerial
0	S1-13.1	Little Delta River	Stream	Aerial
1	S1-15.4	trib to Tanana River	Stream	Aerial
2	S1-15.5	trib to Tanana River	Stream	Aerial
3	S1-16.4	trib to Tanana River	Stream	Aerial
4	S1-17.2	trib to Tanana River	Stream	Aerial
5	S1-22.4	Joins another stream flows into TR	Stream	Ground
6	S1-22.4	Joins another stream flows into TR	Stream	Ground
7	S1-24.6	Joins another stream flows into TR	Stream	Aerial
В	81-24.9	Joins another stream flows into TR	Stream	Ground
9	S1-25.3	Joins another stream flows into TR	Stream	Ground
0	S1-23.3	Delta Creek	Stream	Aerial
1	S1-27.5	Braid/side channel of Delta Creek		
2	S1-20.3 S1-33.3	drains marshy or small lakes	Stream Stream	Aerial Aerial
3	S1-33.3	main fork of Clear Creek	Stream	
4	S1-37.6 S1-41.4			Aerial
1 5		drains marshy or small lakes	Stream	Aerial
5 6	S1-42.4	drains marshy or small lakes	Stream	Aerial
0 7	S1-46.5	drains marshy or small lakes	Stream	Aerial
<i>,</i> 8	S2-1.2	trib to TR between TR and FS	Overflow	Ground
9	S2-1.3	trib to TR between TR and FS	Overflow	Ground
	S2-2.7	trib to TR between TR and FS	Overflow	Aerial
0	S2-3.3	trib to TR between TR and FS	Overflow	Aerial
31	S2-4.6	trib to TR between TR and FS	Overflow	Aerial

Record Number	Crossing Identifier	Stream Name or Connection	Initial Classification	Survey Method
82	S2-4.7	trib to TR between TR and FS	Overflow	Aerial
83	S2-4.8	flows from TR to FS, same as above	Overflow	Aerial
84	S2-6.7	flows from TR to FS, same as above	Overflow	Aerial
85	S2-7.0	flows from TR to FS, same as above	Overflow	Aerial
86	S2-7.6	flows from TR, some slough channels connect ds	Stream	Ground
87	S2-8.4	flows from Alaska Range, connects ds to fs above	Stream	Ground
88	S2-10.5	flows from Alaska Range to TR	Stream	Ground
89	S2-12.8	R edge of Little Delta River	Overflow	Aerial
90	S2-13.4	small channel from Little Delta River to TR	Overflow	Aerial
91	S2-14.5	trib to TR	Stream	Aerial
92	S2-14.6	trib to TR	Stream	Aerial
93	S2-15.2	trib to TR	Stream	Aerial
94	S2-17.2	L edge of TR braid channel	Stream	Ground
95	S2-17.6	L edge of TR braid channel	Stream	Ground
96	S2-18.3	L edge of TR braid channel down to 22.4	Overflow	Ground
97	S2-20.3	same as above	Overflow	Ground
98	S2-20.9	same as above	Overflow	Aerial
99	S2-21.7	same as above	Overflow	Ground
100	S2-22.3	same as above	Overflow	Aerial
101	S2-22.7	FS to TR	floodplain slough	Ground
102	S2-23.1	FS to TR	floodplain slough	Aerial
103	S2-24.4	can't id on figs available	Overflow	Aerial
104	S2-25.2	connects ds to FS S2-22.7	Stream	Aerial
105	\$2-27.1	small drainage from welland	Overflow	Ground
106	S2-27.7	Clear Creek	Stream	Ground
107	S2-30.0	trib to TR	Stream	Aerial
108	S2-30.2	connects to TR at both ends	stream/floodplain slough	Aerial
109	S2-32.6	small trib to TR	Stream	Aerial
110	S2-33.7	small trib to TR	Overflow	Aerial
111	S2-36.2	connects ds to TR	Stream	Ground
112	S2-39.3	trib to \$2-36.2	Stream	Aerial
113	BLS-7.1	trib drains to Tanana River	Stream	Aerial
114	BLS-11.7	Dry Creek	Stream	Ground
115	BLS-14.5	not able to find	Stream	Aerial
116	BLS-16.4	trib drains to Clear Creek	Stream	Aerial

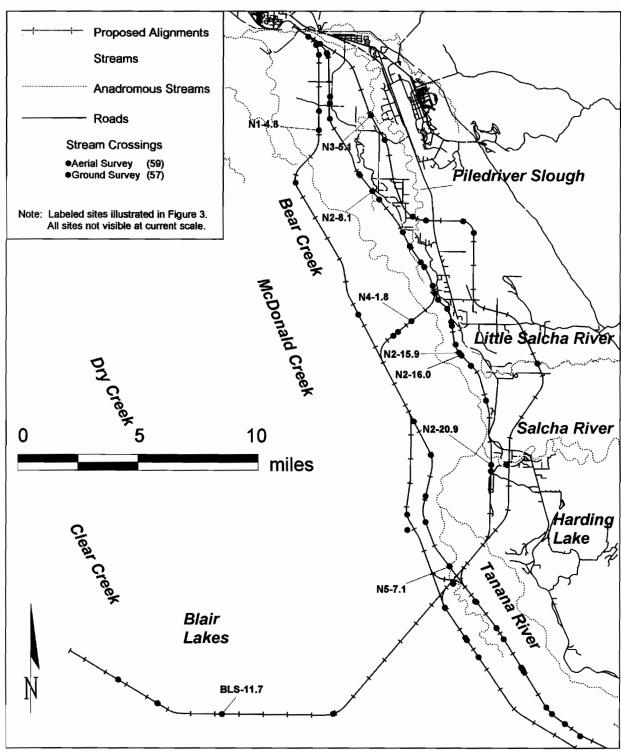


Figure 1. Location of stream crossing survey sites for northern alignments, Northern Rail Extension Project, Alaska.

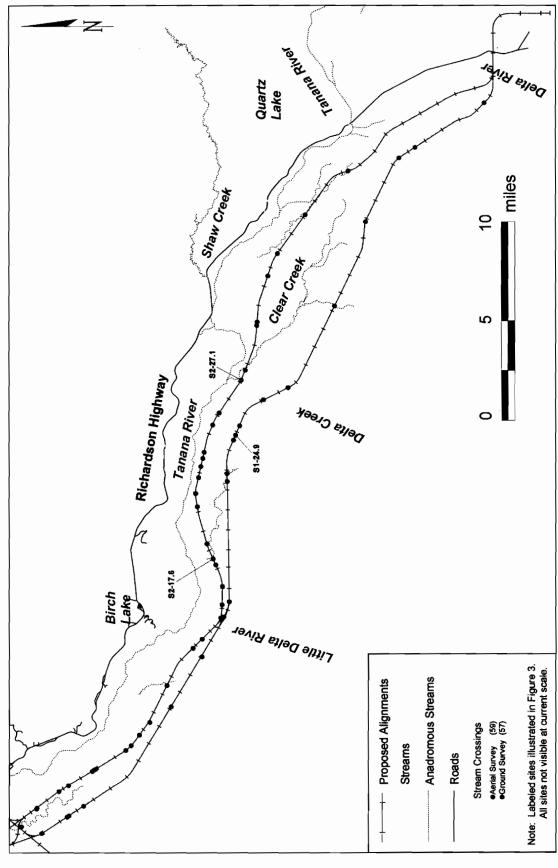
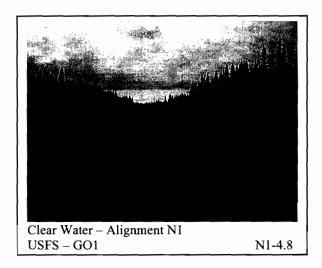
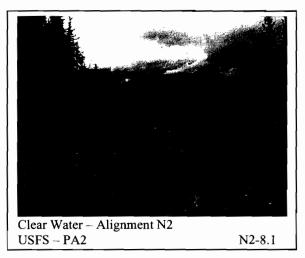
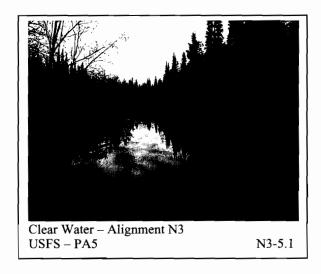
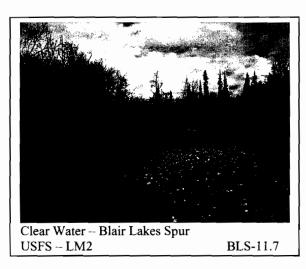


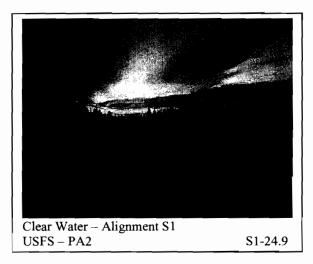
Figure 2. Location of stream crossing survey sites for southern alignments, Northern Rail Extension Project, Alaska.











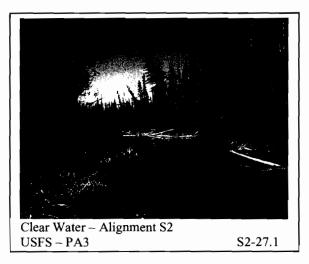
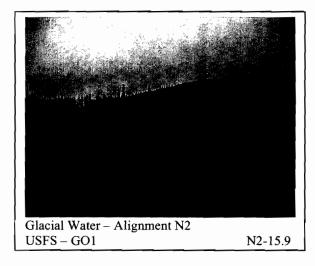
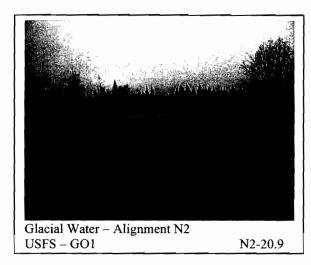
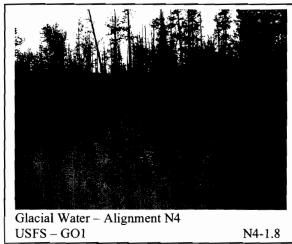
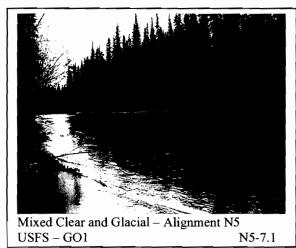


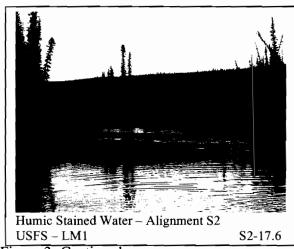
Figure 3. Photographs showing representative water-type and stream channel type, Northern Rail Extension Project, Alaska.











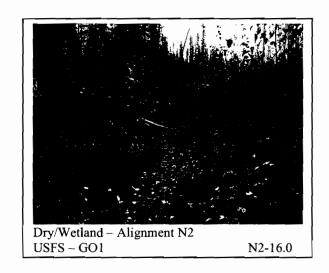


Figure 3. Continued.